294 tory. Palm leaf originates in Ario de Rosales,
[439] whence it is transported to the market at
Paracho. Weaving of the straw into braid is
[438] done by women of the several small villages in
the *municipio* of Paracho. The finished braid
is sold in the Paracho market, the bulk of it
going to the village of Jaracuaro on an island in
Lake Pátzcuaro. The thread used for sewing
the braid is an imported machine-made thread.
The tools of a hat maker include:

[413]

Sewing machine
3 or 4 hat blocks
Wooden paddle for blocking
Smooth stone for blocking
Wooden reel for thread (which is bought in skeins)
Iron punch for ventilators
Roller like a clothes-wringer for straightening and smoothing braid

The type of hat most commonly made has a low crown and broad brim. Each hat requires about three bundles of braid. The braid is sewn together in a spiral beginning at the middle of the crown. Each spiral of the braid overlaps its predecessor about three-quarters or five-sixths of its width. One man, working steadily, can make about three hats a day, but no one in Cherán works steadily every day.
[463] Essentially, hat making is a part-time occupation. Some hat makers are also farmers, while one is also a "tailor." Another also operates a *nixtamal* mill. One hat maker employs an assistant who is said to be paid 50 centavos a hat. This is doubtful in view of hat prices and the cost of materials.

294 Sometimes hats are whitened. They are
386 first treated with glue, then successively coated with *oxido* (a crystalline material melted down), a white pigment (*blanco de sin*), and then a white varnish (*blanco de España*). None of these materials was further identified. The price obtained for hats varies with the thinness of the braid, fineness of the sewing, and the finish applied.

286 *Embroidery, crochet, and drawn work.*—A
531 number of women ornament women's blouses
[462] or make crocheted petticoat borders as a part-time occupation. Women's blouses are sometimes equipped with crocheted yolks. Crocheted bands are also placed on the short blouse sleeves. Bands of embroidery for the bottoms

296 of petticoats are made by one woman, although
● 531 this technique is primarily found in Nahuatzen. The proportion of women doing this work seems significantly smaller in the third *cuartel* or *barrio* when compared with the other *cuartels*.

The crochet may be replaced by embroidery or drawn work, especially on finer materials such as linen or rayon. Designs either come "from one's head" or patterns may be bought in market. Usually the poorest designs come from the market, but no evidence was found either to indicate preservation of traditional patterns on the part of those not using commercial patterns, or to indicate creativeness in designs. Blouses decorated with crochet involve 1 week's part-time work, and embroidered or drawn-work blouses, from 1 to 3 weeks.

286 *Blanket weaving.*—About four men in Cherán weave blankets. These men buy raw wool, and wash, clean, card, and spin the wool, and do the weaving. White, brown, and black colors are usually natural wool colors. For blue, the
[386] only other common color, the weaver dyes white wool with indigo. A urine mordant is used. To produce a gray thread, white, black, and blue wool are mixed together before carding. Raw wool is washed and cleaned, losing about one-third its weight in the process.

293 Carding is done with commercial steel cards which cost $8.00 a set and last about 3 years.
[435] A handful of wool is placed on one card and the other is drawn across it several times. The wool is then folded on one of the cards and the process repeated. If wool of two or more colors is being mixed, the rectangles of carded wool are torn into pieces, mixed together, and carded a second time in order to give a more uniform color.

Spinning is done with a wheel (fig. 6). The edges of a rectangle of carded wool are folded along the long side. The rectangle is then pulled apart down the middle except at one end, giving a strip of carded wool about 1½ inches wide. One end is thrown over the left arm and the other end fed into the yarn with the left hand while the wheel is turned with the right. When 6 to 8 inches are lightly twisted, the yarn is stretched to from 24 to 30 inches, given a tighter twist, and then wound on the spindle (fig. 6). [Text continued on page 36-b]

343 quent on the roofs of kitchens. If the much
335 inferior pine shake is used, the nails usually are not driven all the way in and a length of wire is run from one nail to another, a turn being given about each nail (fig. 8, *c*). This may be done with fir shakes also, in which case the nails are driven all the way in after wiring.

The door is usually carefully made and is bought from a master carpenter. The hinges and latch are usually of metal, although the hardware may be crude. If a well-made door cannot be afforded, however, the door may consist merely of loose upright planks fitting in grooves at top and bottom.

A hinged trapdoor is placed in the opening to the loft. This is usually a well-built door bought from a carpenter and fastened by a stout padlock. A ladder gives access to the door. Sometimes the ladder is a notched log (kékua).

Thirty days is considered the minimum construction time for a house.

343 Some further general comments on houses, or
● 531 "*trojes*," may be made. Houses with carved
335 ornament are called "*trojes labradas*." The parts decorated may include the beam over the front pillars, the piece over the door, capitals, the upper part of the pillars, and "cornices," or special pieces along the upper walls. A "*troje labrada*" usually is carefully made throughout. Undecorated houses, "*trojes lisas*," may be made crudely with only ax and adze as tools. Small "*trojes lisas*" are virtually the only ones to lack a veranda. Occasionally, heavy planks are not used for the ceiling. Instead, light boards are laid over several cross beams, which also support the "*planchas*," or frames, holding the roof.

343 The size of the "*troje*" is taken from the length
335 of the rear wall. Other dimensions vary according to table 1. Lengths in the table are in *varas*.

TABLE 1.—*Proportions of the houses, or "trojes"*

Length of long side	Length of short side	Height of wall	Rafters	Length of rafters	Shakes
Varas	*Varas*	*Varas*	*Number*	*Varas*	*Number*
5	4½	2½	14	3	400
6	5½	2¾	14	4½	500
7	6½	3	14	5	1,000
8	7½	3	18	6	1,100
9	8	3½	18	6	1,800

[p. 14a]

362 used for sleeping ordinarily. This seems to be
184 true of the Lake, Zacápu, and Cañada sections. How far this is a function of the type of architecture and how far it is due to climatic conditions remains to be established. In general, the Sierra region is colder and sleeping is in the kitchen even where masonry-adobe buildings exist.

CEREMONIAL AND SOCIAL FUNCTIONS RELATED TO THE TARASCAN HOUSE

342 and are expected to attend or send excuses. When
431 they arrive, they give the householder or his wife
476 a package of cigarettes or 10 or 15 centavos, which is regarded as the equivalent of the package of cigarettes. The men present their cigarettes to the man of the house, the women to the wife.
[576] The man salutes those who make this present, tipping his hat and shaking hands. The women also shake hands and curtsey. The women help in the preparation of food, while the men help the master builder and his assistants with the roof.

342 After the work is well along, a bottle of *aguar-*
264 *diente*, or *charanda*, is circulated at intervals among those working. When the work is com-
476 pleted, the men are fed, then all the boys. They are all seated on two logs facing one another. Male relatives of the house owner assist in serving; sometimes a *compadre* will aid also if he is a particularly good friend of the householder. The women eat in a group near the fires where cooking
[262] is done. The food is the regular ceremonial food: tortillas, beef stew with chile and cabbage (čurípu), and tamales (kurúnda).

342 The master builder meanwhile leaves the house and shortly afterward returns with his wife and other immediate members of his family. They are seated on a mat facing the new house and are
[531] fed there. A cross with an arch over it, decorated with paper flowers, is set in the middle of the ridge of the roof.[6] It is said to protect the house against violent storms and the devil.[6] The house

[6] Use of the cross on the house is common throughout the Tarascan area. In most of the Sierra towns, the crosses are only some 10 inches (25 cm.) in height, but in Parícutin they are over a meter (39 in.) tall. Here the cross is placed against the house wall, and often with a vase or jar for flowers tied to it. Tile-roofed houses have the cross painted in white on the tiles, fastened to the wooden "shoe" supporting the ridge pole, or carved on the capital.

In Paracho, the priest is often brought to bless a new house. Two men go to request the priests' presence. They are regarded as godfathers of the house and become *compadres* of the house owner and the master carpenter.

286 ducers. In many towns only three or four *obrajeros* operate full time and produce mainly for local consumption. Raw wool is purchased locally, is washed, carded, dried, and spun by the *obrajero*. In addition to manufacturing blankets,
[438] some weavers in Nahuatzen, Charapan, and Tanaco make woolen cloth for the traditional black skirt, which is still worn by most Tarascan women. Such skirts, however, are being made increasingly from factory-woven woolens purchased in mestizo towns.

531 **Embroidery and sewing.**—In the Sierra villages
438 of San Lorenzo, Tarecuato, Angahuan, Ahuíran, Cuanajo, Nahuatzen, and Charapan some women specialize in cross-stitching and embroidering designs on blouses (*huipiles*), napkins, and tablecloths. Many of these articles are for tourist trade in Uruapan, Zamora, and Pátzcuaro.
286 During the colonial period and the first half of the 19th century, the men and women of Ahuíran and Pomacuarán knitted men's stockings of cotton thread, using otate needles (AGN Historia, vol. 73, f. 344; Martínez de Lejarza, 1824, pp. 179–180).
[439] Ahuíran stockings were sold to mestizos and Spaniards over a wide area, but this trade declined after the change in styles of men's clothing in the early 1800's.

294 **Hat making.**—Among the Tarascans this indus-
[177] try was introduced probably in early colonial days.[145] However, the first mention of the industry comes from the report of 1789, which cites it in Nurío (AGN Historia, vol. 73, f. 348). There, hats were made of wool, likely by a felting process, but the industry had disappeared by the end of the last century. None of the colonial sources mentions the manufacture of straw hats in Tarascan towns. Old men from Pichátaro remember hat making during their childhood, which fact at least dates the industry in the last half of the 19th century. (Palm-leaf hats were made in Morelia at the end of the colonial period, according to Martínez de Lejarza, 1824, p. 29.)
294 Today hats (principally of palm leaf, some of
438 wheat straw) are made in seven Tarascan towns, Jarácuaro Island being the main center.[146] Palm leaf brought up from the *tierra caliente* is cut in thin sections, which are braided into strips, called

[145] According to tradition, hat making was one of the many industries which Don Vasco de Quiroga taught the natives. (Leon, 1904, p. 62.)

[146] At least one member (and often three or four) of every family on Jarácuaro Island makes hats. Having little tillable land, this pueblo is one of the most specialized home-industry towns in the Tarascan area.

322 late beaters, and *malacates*, were made in Charapan
[438] and Cocucho, but this activity has now disappeared. Most of the turned objects are shaped from madroño wood (panáŋksa). Carving is done by pressing variously shaped steel chisels and gouges against the whirling block of wood.
[531] In Paracho, designs are painted and burned into objects, and the surface lacquered or varnished.
[177] The wheel lathe, an early Spanish introduction, is used by most cabinetmakers in the area for turning wood.

Cabinet work.—As mentioned earlier, cabinet work was rapidly adopted by Tarascan craftsmen in the early colonial period. In the 17th and 18th centuries inventories of miners' and merchants' household goods in west-central and northern Mexico rarely fail to mention chairs, tables, boxes "de Mechoacán." The majority of present Tarascan towns has at least one cabinetmaker who partially satisfies local demand for furniture. In
[438] Paracho, Corupo, and Cuanajo—the Tarascan furniture centers—carpenters make chairs, tables, bed frames. Cuanajo is famed for its wooden chests, which are marketed in all parts of Michoacán. Most furniture is made from pine wood with simple tools (saw, mallet, plane, chisel, gouge). As mentioned above, chair and table legs are turned on the wheel lathe (fig. 6). The more common jointing techniques used include mor-

942

●[531]

PLATE 2.—Mission types. a, Front view of door from double house (c), Quiahuix. b, Back view of door from the street, Huecorio. Note the thick wall characteristic of adobe. c, Elaborately carved door, Chilcuautla. d, Window formed by 2 adjacent wooden planes, Cuanajo. e, Shuttered plank window leading to living room, Cuanajo. f, Ruined gate, Huecorio. g, Façade of Yuririapundaro. Note arch forms.

[End-plate 3]

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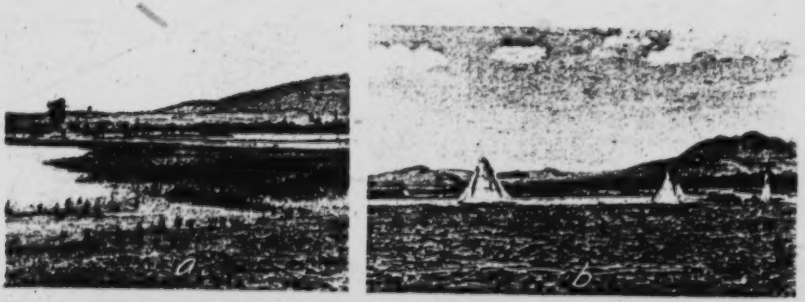

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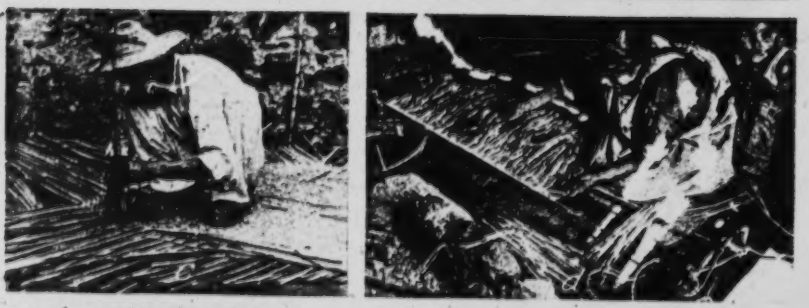

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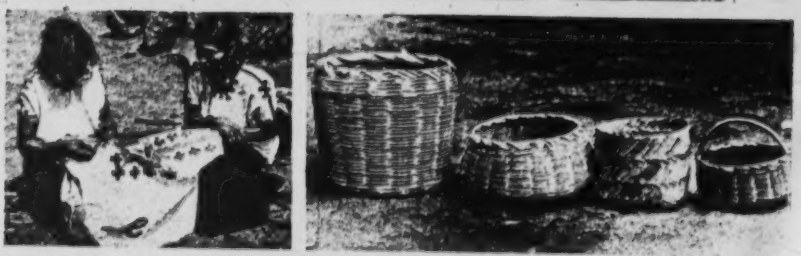

PLATE 12.—Textiles. a, A milpa of tule along the shore of Lake Pátzcuaro, between San Jerónimo and San Andrés. Many potato makers own their own milpas, but sometimes portions of the bruises are leased to tule makers, who harvest the reeds and distribute them to various villages around the lake. b, Harvesting tule, Jarácuaro Island, Lake Pátzcuaro. After partially drying in the sun, the reeds are bundled into sheaves and stacked in shocks. c, Weaving petates, Ihuatzio. Note the wooden mallet on the mat near the man's hands. d, Making esparto, Aranzazuquaro. Work is done inside the kitchen. Note the hearth, lower left. Palm leaves are kept moist by dipping them in the lake of water at left. e, Handwinding a basket, or blower, Tzintzuntzan. f, Bundels weaven on called d'Atzitz and is used to carry fish and tamales. The tortilla basket is a thonal (the Tzintzuntzan call it "tenate") for tortillas. The handled basket at the right (simply named "canasta") is for carrying eggs, pitinchis, and other fish.

[End-plate 12]

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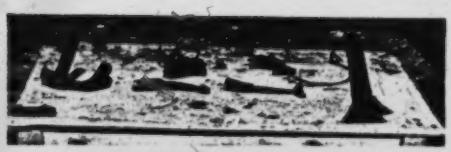

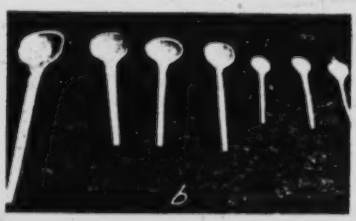

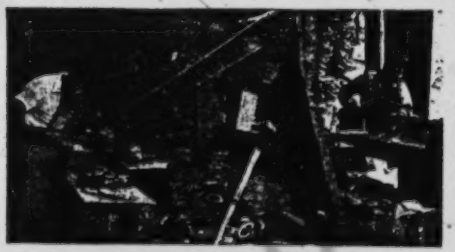

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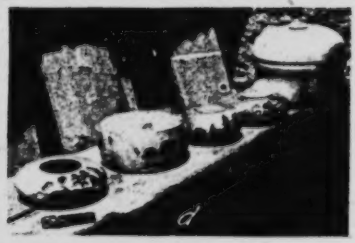

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PLATE 12.—Woodwork. *a*, Gouging tools, Pomuch'ensero. *b*, Wooden spoons and ladles, Pomuch'ensero. *c*, Modern electricity powered lathe shop, Paracho. *d*, Turned objects made at Paracho. *e*, Cabinetmaker's shop in house lot, Cocupao. *f*, Making umbrellas with the bow lathe, Paracho. *g*, Nest of wooden boxes, Cuanejo. *h*, Small (3 feet high) folding chair commonly made in Cuanejo. *i*, Indian made at Ihtla.

[End-plate 13]